FIG.1A

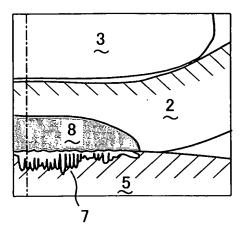


FIG.1B

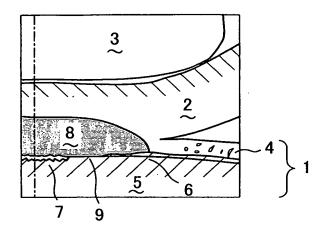


FIG.2

weld cycle time	peripheries of nuggets	centers of nuggets
1	Si:3.1%, Fe:35.6%	Si:1.7%, Fe:37.6%
3		Si:0.9%, Fe:40.8%
6		Si:0.8%, Fe:46.0%

FIG.3

